

# PATENT SPECIFICATION



Application Date: Sept. 7, 1922. No. 24,238/22.

205,291

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## PROVISIONAL SPECIFICATION.

### Improvements in Thermometers.

I, FRANCIS McNALLY, of 8, 9 & 10, Hatton Garden, in the County of London, a British subject, do hereby declare the nature of this invention to be as follows:—

My invention relates to solar radiation thermometers which instruments are extremely liable to damage in transit. Hitherto the thermometer has been suspended in its outer vacuum tube by corks at either end fitting the vacuum tube with a hole in their centre fitting the thermometer, this was later superseded by suspending the thermometer in the vacuum tube in two spiral springs instead of the corks, this method saved a lot of breakage by easing any horizontal jar, but any severe end jar caused the tube to slip in the springs and come

in contact with the end of the vacuum tube.

My improvement consists of making at the end of the thermometer a curved enlargement to prevent the tube slipping through the one end spring, one way, and forming on the end of this globular enlargement a conical piece of glass over which a spiral spring is placed which reaches to the end of the vacuum tube, thus forming a spring buffer to check any end movement the other way, and by this means any amount of end jar may take place without breaking the thermometer.

Dated this 7th day of September, 1922.

H. T. TALLACK,  
Agent for Applicant,  
10, Great Turnstile, High Holborn,  
W.C. 1.

## COMPLETE SPECIFICATION.

### Improvements in Thermometers.

I, FRANCIS McNALLY, of 8, 9 & 10, Hatton Garden, in the County of London, a British subject, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

My invention relates to solar radiation thermometers which instruments are extremely liable to damage in transit. Hitherto the thermometer has been suspended in its outer vacuum tube by corks at either end fitting the vacuum tube with a hole in their centre fitting the thermometer, this was later superseded by suspending the thermometer in the vacuum tube in two coil springs instead of the corks, this method saved a lot of breakage by easing any hori-

zontal jar, but any severe end jar caused the tube to slip in the springs and come in contact with the end of the vacuum tube. My improvement consists of making at the end of the thermometer a curved enlargement to prevent the tube slipping through the one end spring, one way, and forming on the end of this globular enlargement a conical piece of glass over which a spiral spring is placed which reaches to the end of the vacuum tube, thus forming a spring buffer to check any end movement, the other way, and by this means any amount of end jar may take place without breaking the thermometer. In the accompanying drawing A is the ordinary outer glass casing, B B the two coil springs in which the thermometer C is usually suspended, D is the globular enlargement and

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conical piece blown on to the thermometer tube and E the spiral spring fitting over C and extending to the end of the enclosing tube.

5 Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

10 In solar radiation thermometers the

use of enlargement and cone D and spiral spring E substantially as herein described and illustrated in the accompanying drawing.

Dated this 5th day of June, 1923. 15

H. T. TALLACK,  
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London, W.C. 1.

[This Drawing is a reproduction of the Original on a reduced scale]

